AMENDMENTS TO THE CLAIMS

The following listing of claims replaces the claims of record in this application.

LISTING OF CLAIMS:

Claims 1-28 (cancelled)

29. (currently amended): A process for preparing an established avian embryonic germ (EG) cell line, which comprises the steps of:

(a) culturing primordial germ cells (PGCs) isolated from a gonad of an avian embryo at a stage ranging from 24 to 30 by employing a layer of germinal ridge stroma cells (GRSCs) as a feeder layer in a medium supplemented with a cell growth factor and leukemia inhibitory factor (LIF) for a period of time sufficient to obtain EG cell colonies, wherein the growth factor comprises IL-11 and IGF-1 as an essential ingredient for the survival and proliferation of EG cells;

(b) culturing EG cells contained in sad EG cell colonies in a medium supplemented with the cell growth factor and leukemia inhibitory factor (LIF) as in step (a) by employing a mitotically active feeder layer for a period of time sufficient to produce EG cell colonies; wherein the growth factor comprises IL-11 and IGF-1 as an essential ingredient for the survival and proliferation of EG cells; and

(c) recovering and subculturing EG cells in said EG cell colonies of step (b) in a medium supplemented with the cell growth factor and leukemia inhibitory factor (LIF) as in step (a) with a mitotically active feeder layer for a period of time sufficient to establish the EG cell line ~~consisting essentially of undifferentiated avian cells expressing EG cell characteristics~~ showing characteristics of a pluripotent cell, wherein the growth factor comprises IL-11 and IGF-1 as an essential ingredient for the survival and proliferation of EG cells, and wherein ~~the undifferentiated avian cells of the EG cell line expressing EG cell characteristics~~ the EG cell line ~~are~~ is stained with Periodic Acid-Shiff's (PAS) reagent, ~~are~~ is reactive to anti-SSEA-1 antibody, ~~show~~ shows substantially no alkaline phosphatase activity, ~~form~~ forms an embryoid body in the absence of a differentiation inhibitory factor, ~~are~~ is capable of differentiating into various cell types and when injected to a recipient egg, a chimera expressing the EG cell phenotype is produced.

30. (original): The process of claim 29, wherein the avian species is turkey, chicken, quail, pheasant or duck.

31. (original): The process of claim 29, wherein the growth factor further comprises stem cell factor(SCF), basic fibroblast growth factor(bFGF) or a mixture thereof.

32. (original): The process of claim 29, wherein the amount of IL-11 is from 0.0004 to 4 ng/ml and the amount of IGF-I is from 0.1 to 1000 ng/ml.

33. (original): The process of claim 31, wherein the amount of SCF is from 0.05 to 500 ng/ml and the amount of bFGF is from 0.1 to 1000 ng/ml.

34. (original): The process of claim 29, wherein the amount of LIF is 0.1 to 1000 units/ml.

35. (original): The process of claim 29, wherein the medium further comprises mammalian or avian serum.

36. (original): The process of claim 29, wherein the medium further comprises a supplementary ingredient selected from the group consisting of sodium pyruvate, glutamine, β-mercaptoethanol and a mixture thereof.

37. (original): The process of claim 29, wherein the feeder layer employed in step (b) and/or (c) is fibroblast.

38. (original): The process of claim 37, wherein the fibroblast is avian fibroblast or avian embryonic fibroblast.

39. (original): The process of claim 38, wherein the avian species is chicken.